

Erythema Migrans in Early Disseminated Lyme Disease

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A 22-year-old woman was admitted to the hospital with fevers, neck pain, the “worst headache of her life,” and bilateral knee pain. The patient reported a history of uveitis and recounted a recent tick exposure. Physical examination revealed multiple red, circular, nonpruritic skin lesions with bull’s-eye appearances that were approximately 2 inches in diameter and located on the patient’s legs and thighs (pictured). Additionally, she had nuchal rigidity and photophobia. The patient was empirically given intravenous acyclovir (10 mg/kg every 8 hours) and ceftriaxone (2 g every 12 hours) because of concerns for meningitis. Results of a serum Lyme enzyme immunoassay test and a Western blot analysis were positive for Lyme disease. Microscopic examination findings of cerebral spinal fluid (CSF) were unremarkable. After 3 days in the hospital, the patient was discharged with a 21-day treatment plan of oral doxycycline (100 mg twice daily). One week after hospitalization, CSF analysis revealed a positive Lyme IgM antibody. Serum testing for *Anaplasma phagocytophilum* IgM revealed a titer of 1:320. In addition, the patient’s bilateral uveitis was worsening while she was receiving doxycycline. Because of the worsening uveitis and the CSF test result, the patient received a 28-day treatment plan of intravenous ceftriaxone (2 g daily) for meningitis. After treatment, the patient was followed up and her symptoms had resolved. Physicians should be aware of potential complications with late-stage Lyme disease, including uveitis and other tick-borne diseases.



Suggested Reading

Wormser GP, Dattwyler RJ, Shapiro ED, et al. The clinical assessment, treatment, and prevention of Lyme disease, human granulocytic anaplasmosis, and babesiosis: clinical practice guidelines by the Infectious Diseases Society of America. *Clin Infect Dis*. 2006;43(9):1089-1134.

Wormser GP. Clinical practice: early Lyme disease. *N Engl J Med*. 2006;354(26):2794-2801.

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